Peachwood II Pond (#12894) Stormwater Management Facility Repair





Public Meeting June 5, 2019 800 Briggs Chaney Road, Silver Spring, MD

Introductions

Miranda Reid

Planner Montgomery County DEP

Paul Bogle, P.E.

Sr. Engineer
Montgomery County DEP

Matthew Ernest, P.E.

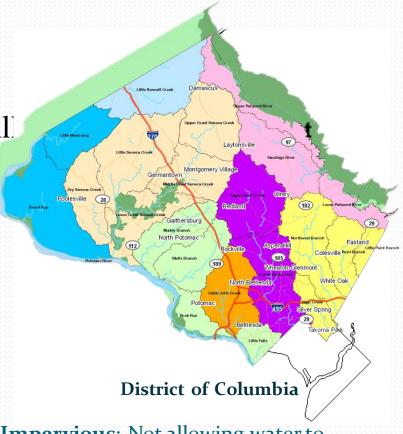
Associate/Water Resource Engineer A. Morton Thomas and Associates

Tonight's Agenda

- Background
- Project goals
- Proposed pond repair design
- What to expect during construction
- Project schedules
- Questions/Comments

Montgomery County, MD

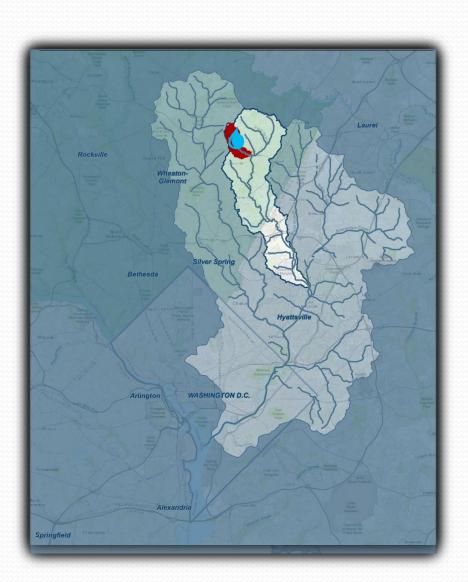
- Over 1,000,000 people
- 500 sq. miles
- About 12% impervious surface overal
 - About the size of Washington DC
- Over 1,500 miles of streams
- Two major river basins:
 - Potomac
 - Patuxent
- Eight local watersheds



Impervious: Not allowing water to soak through the ground.

What is a Watershed?

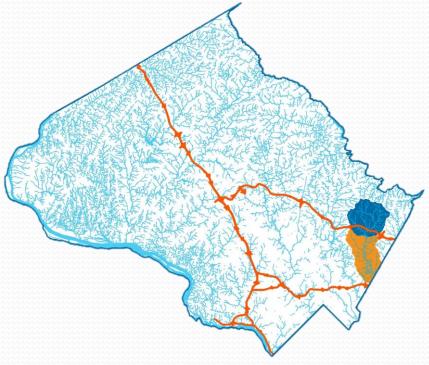
- A *watershed* is an area from which the water above and below ground drains to the same place.
- Different scales of watersheds:
 - Chesapeake Bay
 - Potomac River
 - Anacostia River
 - Paint Branch
 - Peachwood II SWM Pond
 - Neighborhood-to a storm drain



Paint Branch Watershed

- Paint Branch is a Class III Stream
 - Growth and propagation of brown trout
- Special Protection Area (SPA)
 - High-quality/sensitive water resources or environmental features
 - Resources threatened by land use changes such as development
 - Developers must follow strict requirements
 - 10% Impervious surface cap





What Governs Us?



National Pollutant Discharge Elimination System (NPDES) permit program decreases water pollution by regulating pollution sources.



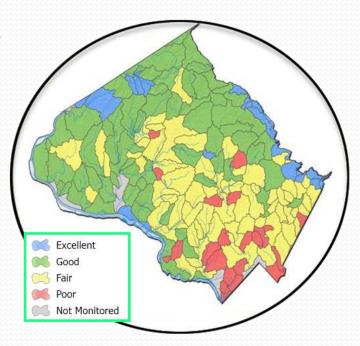
The Maryland Department of the Environment (MDE) requires the County to obtain an MS-4 Permit. This regulates Stormwater Discharges and requires the County to inspect and maintain all stormwater structures.



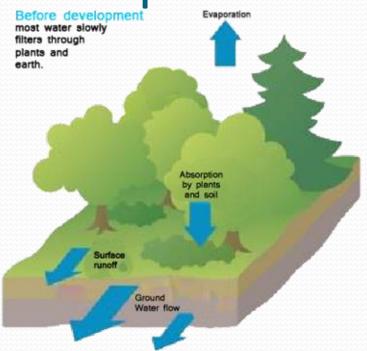
Code of Montgomery County, Article II, Ch. 19 (COMCOR) requires DEP to inspect and enforce maintenance of all stormwater structures in the County.

What is the County Doing to Protect Streams?

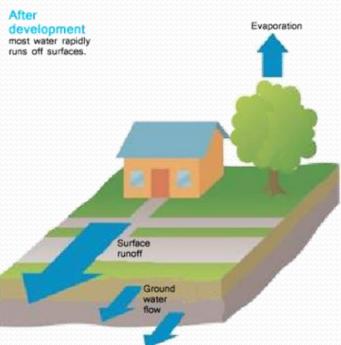
- Watershed Restoration/Maintenance
 - Stream Restoration
 - Low Impact Development
 - Stormwater Pond Retrofits/Maintenance
 - RainScapes/Private Property Projects
- Monitoring/Evaluation
- Education and Outreach
- Special Protection Areas/Planning



Development and Watersheds



- Evaporation
- Infiltration into ground water
- Less issues with runoff



- Less evaporation
- Less infiltration into ground water
- MORE runoff!

Managing stormwater protects local streams and watersheds

- Stormwater ponds are important watershed management tools, because they:
 - Remove pollutants
 - Reduce stream erosion
 - Improve the quality of both local streams and the Chesapeake Bay



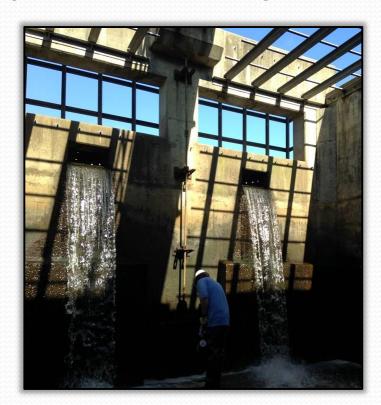
Stormwater Facility Maintenance Program

- DEP is responsible for inspection of all stormwater management facilities
- DEP is responsible for ensuring all stormwater facilities are functioning properly
- Funded by Water Quality Protection Charge



Maintenance Responsibility

- Before 2006, property owners responsible for all maintenance
 - DEP started a shared maintenance program for residential property owners = Transfer Program
 - Property owner is responsible for non-structural maintenance
 - County performs structural maintenance



Non-Structural Maintenance





- Landscaping
- Mowing
- Over grown vegetation
- Woody vegetation
- Trash removal
- Aesthetics

Structural Maintenance

- Typical Routine
 - Blocked low flow
 - Animal burrows on Dam Embankments
 - Minor sediment removal

- Sand filter tilling
- Flow splitter cleaning
- Cleaning UG facilities





Structural Maintenance, cont.

- Capital Projects
 - Dredging
 - Slip-lining
 - Dam failures
 - Barrel replacements
 - Riser replacements
 - Safety improvements
 - Retrofits
 - Repairs





Peachwood II Pond

- Built in 1979
- Peachwood HOA transferred property to MNCP&PC in 1999.
- Non-Structural maintenance performed by MNCP&PC, Structural Maintenance performed by MCDEP.
- Minor improvements conducted in early 2000's
- 2017 inspection found issues with riser structure and outfall pipe
- This project is major structural repair



Project Goals

- Repair Structure
 - Construct New/Replace Existing Metal Control Structure and Outfall Pipe
 - Restore Pond Grades to Design Intent

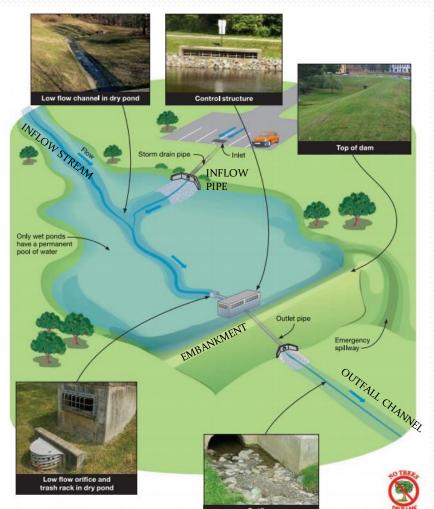
Pond to Remain as a Dry Pond



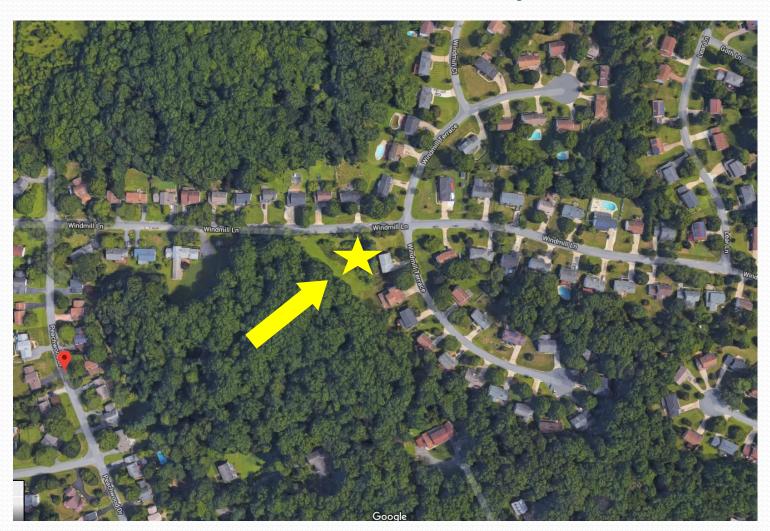
Stormwater Management Pond

Components of a Typical Pond

- Inflow (Stream/Piped)
- Embankment
- Control Structure
- Outfall Pipe
- Outfall Channel
- Emergency Spillway



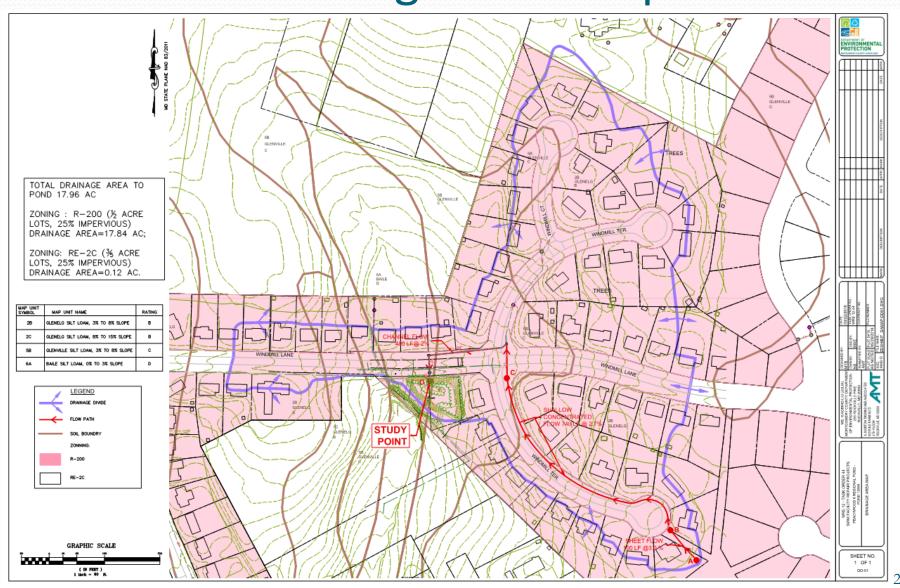
Location Map



Project Status

- Project Started in January 2018
- SWM Concept Design Approved July 2018
- Permit Design and Processing July 2018 to Current
- Final Permitting Approvals Pending Minor Comments

Drainage Area Map



Site Image – Looking NE



Site Image – Looking North



Site Image – Riser and Low Flow



Peachwood II (#12894) Current Permit Plan Design



JUNE 5, 2019

For more information, contact:

Miranda Reid, Miranda.Reid@montgomerycountymd.gov/ 240-777-0802 - Department of Environmental Protection



CONSULTING ENGINEERS

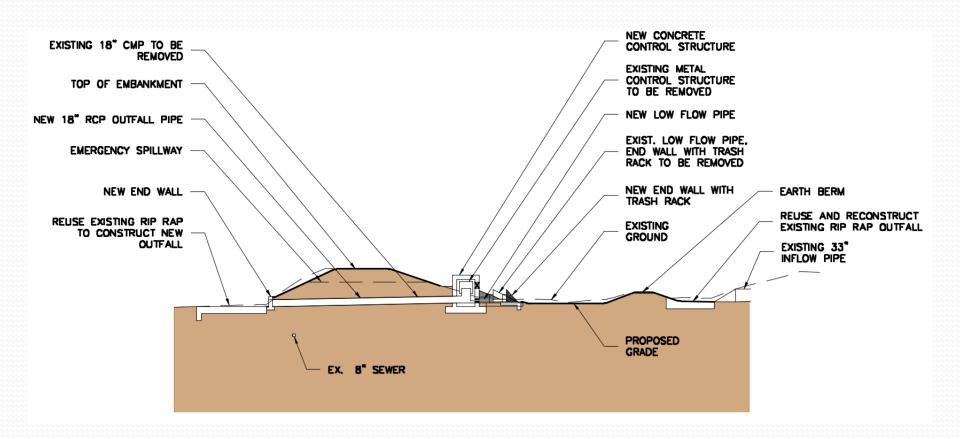
PEACHWOOD II

PROPOSED POND REPAIR

PLAN

ENVIRONMENTAL PROTECTION

Pond Profile View



Area of Construction Access



Permitting Status

	PREMIT STATUS REPORT							
	MDE Wetland/ Waterways	MDE Dam Safety	MNCPPC	MCDPS SWM/ES	MNCPPC Park Construction Permit	Work in WSSC Right of Way	MNCPPC Forest Conservation	MCDPS Work in R/W
Peachwood II 12894	APPROVED	APPROVAL PENDING	APPROVED	APPROVAL PENDING (minor comments to address)	APPROVED	APPROVED	APPROVED	APPROVAL PENDING (minor comments to address)

Construction. What to Expect

Duration

• Approximately 6 to 8 months (weather dependent)

Construction Hours

Monday through Friday, 7AM – 4PM

Safety

Work limits will be fenced with high visibility orange construction safety fence

Traffic

 Minor impacts on Windmill Lane from entering and exiting construction traffic and contractor parking during the day – Maintenance of Traffic Plan

Noise

• Contractor is required to comply with Montgomery County Noise Ordinance

Sediment

 Contractor will be required to comply with Montgomery County Sediment Control Permit and not track dirt onto roads



Schedule

Peachwood II Pond Stormwater Management Facility Repair

- Public Meeting to discuss final designs o6/o5/2019 (Today)
- Permits issued Summer 2019
- Construction Start- Winter 2019/2020
- Completion Fall 2020

Questions/Comments?

Miranda Reid Watershed Planner Montgomery County DEP 240-773-0802

Miranda.Reid@montgomerycountymd.gov